

1.2 Philippine Geography and Topography

A knowledge of the geography and topography of the Philippines assists in the understanding of climatology, as well as atmospheric or oceanographic processes. The Philippine Islands are located in the western North Pacific Ocean, just off the southeastern portion of the Asian continent. Lying in a near north to south orientation, the islands extend from about 4.7°N to 21.5°N and 117°E to 127°E (Fig. 1.1). The Philippines consist of more than 7,000 islands, having an area of about 300,000 km² (90,000 nm²). The islands are grouped into three regions: the **Luzon Region** in the north (composed of Luzon Island and small islands in its vicinity); the **Visayas Region** (composed of many islands near the center, the largest being, Palawan, Mindoro, Panay, Masbate, Negros, Cebu, Bohol, Leyte and Samar); and the **Mindanao Region** (composed of Mindanao Island and small islands in its vicinity). Only the islands of Luzon and Mindanao have areas of more than 80,000 km² (23,000 nm²).

The Philippine Islands are surrounded by large bodies of water. They are bounded on the west by the South China Sea, on the north by the Luzon Strait separating the Philippine Islands from Taiwan, on the east by the Philippine Sea (and the Pacific Ocean), on the south by the Celebes Sea, and on the southwest by the Sulu Sea separating the Philippine Islands from Borneo.

Many of the larger islands have narrow coastal plains, generally less than 15 km (8 nm) in width, and interior highland plains and mountain ranges. Many of the ranges, generally oriented north and south, cover almost the entire length of the islands. Most of the mountain ranges have heights of more than 500 m (1600 ft), with large areas having heights above 1,000 m (3300 ft), and a small number having heights above 2,000 m (6600 ft).

On the largest island, Luzon, several mountain ranges with heights above 500 m (1600 ft) cover almost one-half of the entire island. On the east coast of north and central Luzon, lies the Sierra Madre Range. The Ilocos Range (not depicted on Fig. 1.1) runs along the extreme western coast of the northern Luzon, with the Cordillera Central Range (the longest on the figure) lying between the Sierra Madre Range and the Ilocos Range. The Zambales Range located along the western coast of central Luzon contains Mount Pinatubo (Point "P" on Fig. 1.1) near its southern extremity. Many of the larger islands of the Visayas have mountain ranges extending most of their entire length, with elevations greater than 500 m (1600 ft). Mindanao has extensive mountain ranges along its eastern coast, in its central section and along the western coast, with elevations above 500 m (1600 ft). Similar to those of Luzon, the ranges of Mindanao cover about one-half of the island (Flores and Balagot 1969).

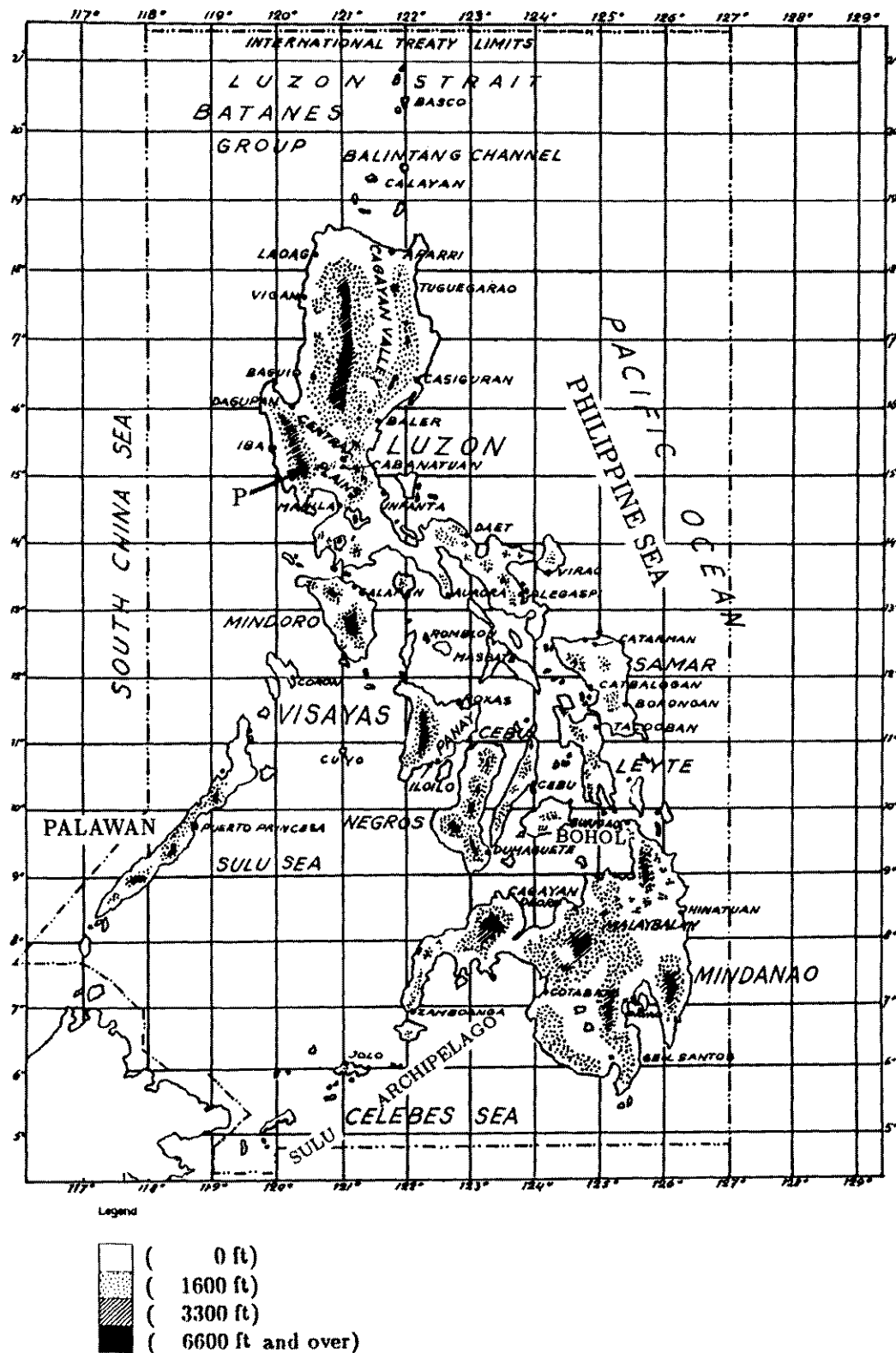


Figure 1.1: Geographical and Topographical Chart of the Philippine Islands. Mount Pinatubo indicated by "P" (adapted from Flores and Balagot (1969)).